

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference R 43494	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/EP2004/004059	International filing date (day/month/year) 16/04/2004	(Earliest) Priority Date (day/month/year) 17/04/2003
Applicant IGENEON KREBS-IMMUNTHERAPIE FORSCHUNGS- UND . . .		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 7 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. Certain claims were found unsearchable (See Box II).

3. Unity of invention is lacking (see Box III).

4. With regard to the title,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the abstract,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the drawings,

- a. the figure of the drawings to be published with the abstract is Figure No. _____

as suggested by the applicant.

as selected by this Authority, because the applicant failed to suggest a figure.

as selected by this Authority, because this figure better characterizes the invention.

- b. none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2004/004059

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
 - a. type of material
 - a sequence listing
 - table(s) related to the sequence listing
 - b. format of material
 - in written format
 - in computer readable form
 - c. time of filing/furnishing
 - contained in the international application as filed
 - filed together with the international application in computer readable form
 - furnished subsequently to this Authority for the purpose of search
2. In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/004059

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 A61K39/395 C07K16/42 C12N15/63

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X ✓	WO 03/097663 A (HIMMLER GOTTFRIED ; KIRCHEIS RALF (AT); LOIBNER HANS (AT); IGENEON KRE) 27 November 2003 (2003-11-27) the whole document ----- EP 0 759 442 A (ONCOGEN) 26 February 1997 (1997-02-26) the whole document -----	1-34
X ✓		1-34

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

° Special categories of cited documents :

- A• document defining the general state of the art which is not considered to be of particular relevance
- E• earlier document but published on or after the international filing date
- L• document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- O• document referring to an oral disclosure, use, exhibition or other means
- P• document published prior to the international filing date but later than the priority date claimed

- T• later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- X• document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- Y• document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- &• document member of the same patent family

Date of the actual completion of the international search

25 November 2004

Date of mailing of the international search report

01/12/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

Hermann, P

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/004059

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ✓	SALEH M ET AL: "Generation of a human anti-idiotypic antibody that mimics the GD2 antigen" JOURNAL OF IMMUNOLOGY, THE WILLIAMS AND WILKINS CO. BALTIMORE, US, vol. 151, no. 6, 15 September 1993 (1993-09-15), pages 3390-3398, XP002091381 ISSN: 0022-1767 the whole document -----	1-34
X ✓	BRUMEANU T -D ET AL: "Engineering of doubly antigenized immunoglobulins expressing T and B viral epitopes" IMMUNOTECHNOLOGY (AMSTERDAM), vol. 2, no. 2, 1996, pages 85-95, XP004052673 ISSN: 1380-2933 abstract page 89, right-hand column, paragraph 2 - page 95, left-hand column, paragraph 2 -----	1-34
X ✓	DE 100 59 930 A (FISCHER PETER ; UTTERNREUTHER FISCHER MARTINA (DE)) 29 May 2002 (2002-05-29) paragraph '0005! - paragraph '0007!; figure 1 -----	1-34
A ✓	EP 0 285 059 A (WISTAR INST) 5 October 1988 (1988-10-05) the whole document -----	1-34
A ✓	WAXENECKER G ET AL: "QUALITATIVE AND QUANTITATIVE DISSECTION OF THE IMMUNE RESPONSE TO THE CANCER VACCINE CANDIDATES IGN101 AND IGN301" PROCEEDINGS OF THE ANNUAL MEETING OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH, NEW YORK, NY, US, vol. 43, March 2002 (2002-03), page 560, XP001154274 ISSN: 0197-016X abstract -----	1-34
A ✓	WALLICK C S ET AL: "GLYCOSYLATION OF A VH RESIDUE OF A MONOCLOINAL ANTIBODY AGAINST ALPHA(1-6) DEXTRAN INCREASES ITS AFFINITY FOR ANTIGEN" JOURNAL OF EXPERIMENTAL MEDICINE, TOKYO, JP, vol. 168, September 1988 (1988-09), pages 1099-1109, XP000983430 ISSN: 0022-1007 the whole document -----	1-34

-/-

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/004059

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A <input checked="" type="checkbox"/>	WO 00/41722 A (IGENEON GMBH ; LOIBNER HANS (AT); ECKERT HELMUT (CH)) 20 July 2000 (2000-07-20) the whole document -----	1-34
A <input checked="" type="checkbox"/>	WO 93/24647 A (SANDOZ AG ; SCHOLZ DIETER (AT); JAKSCHE HERBERT (AT); JANZEK EVELYNE () 9 December 1993 (1993-12-09) the whole document -----	1-34
A <input checked="" type="checkbox"/>	WO 01/35989 A (HIMMLER GOTTFRIED ; LOIBNER HANS (AT); IGENEON KREBS IMMUNTHERAPIE FO) 25 May 2001 (2001-05-25) the whole document -----	1-34

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/004059

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 03097663	A	27-11-2003	WO	03097663 A2	27-11-2003
EP 0759442	A	26-02-1997	US	4918164 A	17-04-1990
			US	5614610 A	25-03-1997
			EP	0759442 A1	26-02-1997
			AT	151079 T	15-04-1997
			AU	630592 B2	05-11-1992
			AU	2207788 A	16-03-1989
			CA	1339816 C	14-04-1998
			DE	3855850 D1	07-05-1997
			DE	3855850 T2	20-11-1997
			DK	500888 A	11-03-1989
			EP	0306995 A2	15-03-1989
			ES	2102978 T3	16-08-1997
			FI	884114 A	11-03-1989
			GR	3023725 T3	30-09-1997
			HU	47973 A2	28-04-1989
			IL	87692 A	12-04-1994
			JP	2000494 A	05-01-1990
			NO	884024 A ,B,	13-03-1989
			NZ	226129 A	23-12-1991
			OA	8952 A	30-11-1990
			PT	88459 B	29-01-1993
			US	5766588 A	16-06-1998
			ZA	8806752 A	30-05-1990
DE 10059930	A	29-05-2002	DE	10059930 A1	29-05-2002
			WO	02087611 A2	07-11-2002
EP 0285059	A	05-10-1988	US	4971792 A	20-11-1990
			AT	113845 T	15-11-1994
			CA	1303980 C	23-06-1992
			DE	3852054 D1	15-12-1994
			DE	3852054 T2	18-05-1995
			EP	0285059 A2	05-10-1988
			JP	63279169 A	16-11-1988
			US	5182192 A	26-01-1993
WO 0041722	A	20-07-2000	AT	219687 T	15-07-2002
			AU	768515 B2	18-12-2003
			AU	2796400 A	01-08-2000
			CA	2360382 A1	20-07-2000
			CN	1344167 T	10-04-2002
			CZ	20012581 A3	16-01-2002
			DE	50000243 D1	01-08-2002
			DK	1140168 T3	30-09-2002
			EE	200100366 A	15-10-2002
			WO	0041722 A1	20-07-2000
			EP	1140168 A1	10-10-2001
			EP	1230932 A2	14-08-2002
			ES	2177509 T3	16-12-2002
			HR	20010526 A1	31-08-2002
			HU	0200527 A2	29-06-2002
			ID	30223 A	15-11-2001
			JP	2002534481 T	15-10-2002
			NO	20013093 A	10-09-2001
			NZ	512722 A	25-07-2003
			PT	1140168 T	29-11-2002

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/004059

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
WO 0041722	A		SI 1140168 T1 SK 9642001 A3 TR 200102034 T2	31-10-2002 05-03-2002 21-11-2001
WO 9324647	A 09-12-1993		AT 179214 T AU 678160 B2 AU 4068893 A CA 2134751 A1 CZ 9402851 A3 DE 69324584 D1 DE 69324584 T2 DK 644947 T3 WO 9324647 A1 EP 0644947 A1 ES 2133395 T3 FI 945485 A GR 3030701 T3 HU 71311 A2 JP 11178594 A JP 7507207 T NO 944443 A NZ 252161 A PL 175651 B1 RU 2208642 C2 SG 50721 A1 SK 139894 A3 US 2002146410 A1	15-05-1999 22-05-1997 30-12-1993 09-12-1993 17-05-1995 27-05-1999 23-09-1999 01-11-1999 09-12-1993 29-03-1995 16-09-1999 22-11-1994 30-11-1999 28-11-1995 06-07-1999 10-08-1995 20-01-1995 28-10-1996 29-01-1999 20-07-2003 21-11-2000 11-07-1995 10-10-2002
WO 0135989	A 25-05-2001		AT 409086 B AT 192799 A AT 267020 T AU 2357201 A BR 0015597 A CA 2391927 A1 CN 1390138 T CZ 20021707 A3 DE 50006526 D1 DK 1229936 T3 EE 200200252 A WO 0135989 A2 EP 1229936 A2 HU 0204216 A2 JP 2003514028 T NO 20022333 A NZ 518669 A PL 356770 A1 PT 1229936 T SI 1229936 T1 SK 6542002 A3 TR 200401267 T4	27-05-2002 15-10-2001 15-06-2004 30-05-2001 23-07-2002 25-05-2001 08-01-2003 16-10-2002 24-06-2004 30-08-2004 16-06-2003 25-05-2001 14-08-2002 28-04-2003 15-04-2003 03-06-2002 29-08-2003 12-07-2004 30-09-2004 31-08-2004 06-11-2002 21-07-2004